

AU/ACSC/8450/AY06

AIR COMMAND AND STAFF COLLEGE

AIR UNIVERSITY

**BARRIERS TO IMPLEMENTING STRATEGIC PURCHASING
IN THE DEPARTMENT OF DEFENSE**

by

David A. Searle, Major, USAF

A Research Report Submitted to the Faculty

In Partial Fulfillment of the Graduation Requirements

Instructor: Lt Col Brett E. Morris

Maxwell Air Force Base, Alabama

April 2006

Report Documentation Page				Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE APR 2006		2. REPORT TYPE		3. DATES COVERED	
4. TITLE AND SUBTITLE Barriers to Implementing Strategic Purchasing in the Department of Defense				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Air University Press (AUL/LP),131 W Shumacher Avenue,Maxwell AFB,AL,36112-6615				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited.					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES 39	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

Disclaimer

The views expressed in this academic research paper are those of the author(s) and do not reflect the official policy or position of the U.S. government or the Department of Defense. In accordance with Air Force Instruction 51-303, it is not copyrighted, but is the property of the United States government.

Table of Contents

Introduction	1
Industry’s Approach.....	5
Strategic Sourcing	6
The Path Towards Strategic Purchasing in the DoD	8
“Leverage-Items”	11
Commodity Councils	11
Industry’s Success	13
Benchmarking Industry	14
Barriers to Successful Strategic Purchasing Within the DoD	16
The Difficulty Leveraging Services in the DoD	16
The Effect of Federal Procurement Statutes on Leveraging Services	18
The Effect of the “Buy American Act” on Strategic Purchasing	21
The Effect of Federal Labor Laws and Small Business Goals on Strategic Purchasing	22
No Single-Voice in Federal Procurement	25
Conclusion	29
Bibliography	37

Introduction

One can argue the Department of Defense has always faced a fiscal crisis. Year after year the DoD engages in a “guns versus butter debate” in competing with other agencies for the defense slice of the budget. The debating then shifts to the internal grappling between the services fighting for their parochial piece of the pie. Simply put, there has never been enough to go around. Subsequently, policymakers have always had to make tough budget decisions. Throughout the 90’s following the end of the Cold War, defense budgets were in a steady decline. Between 1990 and 1997 outlays dropped nearly 26% in real terms.¹ Between 1984 and 1998 the defense budget authority declined in real, inflation-adjusted dollars. Over the last five years the budget shows what appears to be a slight increase in defense outlays, but these increases have included increased costs for the Global War on Terrorism, the requirements for maintaining a heightened vigilance, and requirements levied in support of homeland security. In fact, between Sep 11, 2001 to May 2005 the DoD spent approximately \$190B in support of these efforts.

To further compound the problem, upward pressures on defense spending are substantial. First, the DOD faces pressures to modernize and recapitalize many of their weapon systems. The department went through a draw down following the Cold War and achieved mandated reductions in defense spending primarily through reductions in their procuring activity. The department sacrificed acquisitions to free funds for operational readiness. As a result, many of their current weapons systems are nearing the end of their useful life and will soon require replacement. Secondly, the DoD has continuing “must pay” obligations. These include health care costs for retirees, active duty troops, and their families and rising personnel costs. The fact of the matter is that it costs more to maintain a military force each year; in fact, most defense

costs rise faster than inflation. Nevertheless, budget cuts continue. In Jan 2005 Deputy Secretary of Defense Paul Wolfowitz issued Program Budget Decision 753. The decision identified \$30 billion of additional cuts in planned defense spending through 2011. In Mar 2005, then Air Force Chief of Staff Gen. John P. Jumper predicted a \$3 billion shortfall in FY2005 operations and maintenance funds.² There are simply too few dollars available to support current military operations, modernization efforts, and “must pay” bills.

Naturally, within such a fiscally constrained environment the focus of criticism shifts inwards towards an agency’s business practices. When faced with enormous fiscal pressures and a growing budget deficit agencies focus on revamping business processes to get the most out of every dollar spent. “For nearly four decades, Congress, the media and the White House have figuratively and literally hammered the Department of Defense (DoD) and the military services for waste and inefficiencies in buying”.³ The message hasn’t fallen on deaf ears. For years the Department of Defense has recognized cost inefficiencies in their acquisition and procurement practices. In fact, regulations to control defense procurements extend as far back as the 1940’s. The Armed Services Procurement Act of 1947 was essentially the first formal unified defense procurement policy to be established.^{4 5} Early procurement reform efforts in the DOD focused on coordinating procurement reform among the services. The various service’s mission were ambiguous, inter-service competition was high, and in a number of areas procurement programs overlapped.^{6 7} Over the last 30 years there have been over 20 major regulatory and administrative initiatives implemented by Congress and the DoD that were intended to improve cost inefficiencies in defense procurement processes. In 2001, the Office of Management and Budget presented to congress the President’s Management Agenda which delineated a strategy

for improving the management and performance of the federal government. The plan concluded the need for reform as urgent.

As a follow-up effort the GAO assessed the President's Management Agenda in an April 2005 testimony to the U.S. Senate. They found a continuing need for broad based transformations to address major economy, efficiency, and effectiveness challenges in a number of the government's business process. DoD business processes need to change in order to more effectively deliver warfighting capabilities, address growing pressures on resources, and benefit from economies of scale. Procurement transformation is nothing new.

The Air Force's commodity council initiative represents one of the more recent and promising strategic purchasing efforts. Fundamentally speaking, the general premise of a commodities council rests on developing strategies to maximize value by leveraging an organization's buying power in a given commodities sector. According to Mr. Charlie Williams, the Air Force's deputy assistant secretary for contracting, "despite the huge buying power our Air Force dollars should have, we are missing opportunities to leverage our dollars by relying heavily upon local strategies and execution to fulfill individual unit requirements".⁸ Recognizing the potential of a proven industry practice the Air Force established its first council in June 2003 focusing on Information Technology products. To date, the IT Commodity Council reports savings of approximately \$34 million. In 2004, the AF stood up additional councils targeting force protection and medical services. Unfortunately, these councils are in the early stages and the AF has not quantified savings.

The overall goal of this paper is to provide the DoD with an understanding of differences between DoD and private procurement activities and to demonstrate that strategic purchasing efforts in the DoD may not achieve the same gains or benefits realized by those in the private

sector. There are several barriers to successfully implementing strategic purchasing methods within DoD acquisitions. These barriers may obviate or negate the potential of one of industry's most promising procurement practices. While strategic purchasing in the DoD certainly appears promising policymakers need to understand the difference between private and public commodity councils lest their expectations become unsupported and unreasonably optimistic. Unrealized expectations could jeopardize other valid and necessary transformation efforts, could foster a lack of faith in benchmarking proven industry practices, and could lead to a loss of confidence and support from the taxpayer. A key component of the federal acquisition system, in part, is to deliver the best value product or service to the customer, while maintaining the public's trust. Also, policy makers need to understand these differences in conducting cost-benefit analysis on strategic purchasing initiatives. They may find the rewards unable to justify the costs of their business efforts.

Industry's Approach

In their struggles to remain profitable commercial organizations face similar fiscal pressures and dynamics. Market dynamics, competing firms, consumers and stockholders drive organizations towards efficiency and profitability. Cost control in the commercial marketplace is a fundamental business practice. With that in mind, purchasing costs can represent a relatively substantial percentage of an organizations total operating costs. In some cases the purchases of outside goods and services can consume as much as 60% or more of a business' revenues. For example, at Hewlett-Packard, 70% of revenues are used to buy materials for production.⁹ At IBM, the budget for purchasing is over 50% of the company's annual revenue.¹⁰ Gabbard found outside materials and services accounted for almost 70% of average corporate expenditures.¹¹ Consequently, modest reductions in purchasing costs can yield substantial rewards—all which contribute to the bottom line.

As a result, over the last 30 to 40 years leaders have been paying increasing attention to the procurement process and its relationship to profitability. The increased attention to purchasing has led to a dramatic shift in how organizations buy goods and services. Researchers show the procurement process has evolved over the years from what was once a tactical and clerical function to what is now a more strategic endeavor.¹² A series of external events shaped the context. An oil embargo and basic raw material shortages in the 1970's, an interest rate spike and manufacturing crisis in the 1980's and a slowly growing demand coupled with rising overhead costs and weak pricing power in the 1990's pushed the purchasing department to the forefront. Porter describes these series of structural, economic and business shifts, along with global competition and flat revenues as strengthening the argument for total corporate spend control.¹³

In desperate attempts to retain profitability corporate leaders emphasized cost cutting and turned to the purchasing functions to make it happen.¹⁴ In a 2002 survey over 90% of procurement professionals stated they were directed to help reduce their company's costs and that pressures to do so have escalated over the preceding 5 years.¹⁵ This same survey found the overall cost-reduction goal for manufacturing companies averaging 12%.¹⁶ The 90's became the decade of change as businesses widely recognized the supply chain as the answer to lower costs, increased profitability and increased competitiveness. In order to gain a competitive edge in the marketplace, procurement leaders had to develop a strategic orientation to the procurement process.¹⁷ Within this framework procurement professionals developed the procurement approach collectively referred to as strategic sourcing.

Strategic Sourcing

Organizations saw the potential of realizing significant cost reductions and other value-added outputs using strategic sourcing principles. Previous purchasing techniques were more tactical and focused more on independent, localized "wins". Strategic sourcing takes a broader view of a purchase within the context of the entire organization and examines the potential broader, longer-term gains. "It involves taking a more strategic approach to the selection of suppliers – an approach that is more aligned with the organization's competitive strategy."¹⁸ Newhart defines it as "a logical and systematic process for managing and prioritizing an organization's spend."¹⁹ The U.S. government's definition strikes a similar chord. According to the Office of Management and Budget strategic sourcing is the "collaborative and structured process of critically analyzing spending and using this information to make business decisions about acquiring commodities and services more effectively and efficiently."²⁰ Overall, the strategy is fundamentally about getting more for your dollar – certainly a reasonable response

when operating within a fiscally constrained environment. Commercial procurement leaders use strategic sourcing tools to reduce costs and increase operating efficiencies.²¹ Regardless of which definition one clings to, the essence of strategic sourcing centers on two fundamental precepts: 1) spend analysis, and 2) leveraging.

Spend analysis involves a collaborative and structured process for critically analyzing an organizations spending data. “It is the process of aggregating, cleansing, and analyzing corporate spending data for the purposes of reducing costs and improving operational performance.”²² Fundamentally speaking, it requires organizations to identify what goods or services are being purchased, who requires them, and who is currently getting the money (who are the suppliers).²³ The principle rests on the understanding that purchasers must first understand every element of company spend and then evaluate the commodity and how it is being procured. This investigation includes market research and industry analysis. A thorough understanding of spend data allows an organization to then exploit the information by leveraging the organization’s collective buying power in the marketplace to obtain the lowest price for goods and services. Leveraging is a key component of strategic sourcing. It improves an organization’s buying power with contractors and enables it to expect value-added outputs such as better quality, responsiveness and service in addition to reduced costs.²⁴ The object of leveraging is to exploit volume, which is the main determinant of a company’s overall bargaining power. Organizations achieve volume and leveraging by consolidating contracts and aggregating spend with fewer suppliers.^{25 26} “Leverage or buying power is, by far, the most frequently cited benefit of greater purchasing centralization.”²⁷

The path towards strategic purchasing in the DoD

Every purchasing situation is unique. Consequently, procurement strategies will differ depending on a number of internal and external factors. Internal factors are those that reflect the goals of the buying organization such as cost reduction, improved quality, the value of the item, etc. External factors are those market dynamics and other factors that may impact the overall effectiveness of the product or service being sourced. These include things such as the complexity of the market or the availability of a commodity, for example. Using a strategic sourcing approach buyers consider these factors and their influence on the procurement approach.²⁸ The purchaser's task then becomes tailoring a sourcing strategy for a specific commodity that best exploits the buying organization's leverage in a given context. Peter Kraljik, a business consultant, developed a comprehensive, contingency based model to assist purchasers in selecting appropriate sourcing strategies based on two variables: (1) the strategic importance of purchasing in terms of the value added by the commodity (cost of materials, value added profile, profitability, etc), and (2) the complexity of the supply market in terms of commodity availability, entry barriers, monopoly or oligopoly conditions, pace of technological advance, etc. (Figure 1)²⁹ Viewed through another lens, the first variable (importance of purchasing) translates to profit impact. One can view the second variable (complexity of supply market) as supply risk.

a company.³² Compared to leverage item purchases, though, there are fewer, large expenditure transactions for these items. Procurement experts characterize this segment as one with greater supply risk as there are fewer suppliers available and often barriers to entry.³³

Experts frequently categorize the non-critical items sector as a buyer's market. These items typically only constitute approximately 5% of a company's spend.³⁴ The market offers many options and multiple suppliers, and buyers typically have little brand preference. Profit impact and supply risk for this segment are both low. The last category, bottleneck items, also represents only about 5% of a typical organization's spend.³⁵ Supply risk is high as there are typically few sources and options available, and profit potential is low.

Inherent in Kraljick's model is the premise that there is no "one size fits all" approach to procurement. The purpose of the model is simply to ensure procurement officials integrate and align sourcing strategies with the overarching competitive strategy in order to develop an overall strategic supply position that balances competitive goals against supply conditions. With upwards of 90% of purchasing offices operating under the corporate direction to cut procurement costs, and with cost reduction goals as high as 12% on corporate spend, organizations logically placed emphasis on the strategies identified in the upper quadrants -- materials management and supply management. Sourcing strategies for these categories of commodities offer higher profitability profiles than those in the lower quadrants. Leverage items have high profit impact with low supply risk, while strategic items have high profit impact and high supply risk. When a principal goal of an organization is slashing procurement costs, focusing on leverage items and strategic items is appropriate.

“Leverage-Items”

Leverage items offered an attractive starting point for procuring offices anxious to smartly reduce procurement costs. Market capacity is large as is the potential pay-back. With such a large percentage of corporate costs tied to leverage items the potential rewards of even small percentage gains can be enormous. For example, in 2004 Hewlett-Packard spent nearly \$43B on production materials.³⁶ A modest 1-2% cost reduction in purchasing costs could yield nearly \$1B on the bottom line. As indicated by the strategy’s focus for leverage items, the core task involves exploiting the full purchasing power of the organization to increase its bargaining power through leveraging. “Most procurement experts believe 15-20% of purchased materials and services can be saved (billions of dollars in a large company) by centralizing procurement and leveraging a far-flung corporation’s buying power.”³⁷

Commodity Councils

Industry developed the commodity council approach to maximize the strategic sourcing decision across the spectrum of available strategies. A commodity council is a cross-functional team that develops strategies for individual commodity groups by analyzing spend data, defining customer requirements, and conducting market research. “In developing its strategy, the goal of a council is to help maximize the firm’s competitive advantage by extracting the maximum value for the commodity from its suppliers”.³⁸ In other words, councils are responsible for meeting the internal customer’s needs at the lowest total cost. Their principal purpose is to leverage spending at the enterprise level primarily through large lot discounting, but discounts can also be realized through process efficiencies and reduced transaction costs. The team is typically composed of a variety of experts and key stakeholders in the company who work full time on the commodity

team. The most successful teams understood the decision as too important to be assigned as an additional duty; therefore, members were fully committed to the team.³⁹ Organizations used commodity councils to ensure they had the appropriate knowledge mix, credibility, and technical expertise.

Between 2002 and 2003 the Government Accountability Office studied procurement best practices of eleven companies – each a leader in their respective market. They found that companies adopted a strategic approach to “leverage their buying power, reduce costs, better manage their suppliers, and improve the quality of goods and services acquired.”⁴⁰ On average, these 11 companies realized up to 20% in procurement cost savings. The study identified the following four broad principles and best practices for commodity councils: (1) Secure up-front commitment from top leaders, (2) Obtain improved knowledge on procurement spending, (3) Create supporting structure, processes, and roles, and (4) Enable success through sustained leadership, communication, and metrics. (Figure 2) Lasseter identified similar steps in his sourcing model. His “balanced sourcing model” describes a process that ensures competitive pricing from suppliers while simultaneously nurturing a cooperative buyer-seller relationship. He suggests the following seven activities as broad guidelines to be used by a council when developing a particular commodity strategy: (1) Spend analysis, (2) Industry analysis, (3) Cost/performance analysis, (4) Supplier role analysis, (5) Business process reintegration, (6) Savings quantification, and (7) Implementation.⁴¹ With the exception of the savings quantification step in Lasseter’s model, both models address the same fundamental best practices. Lasseter suggests savings quantification is one of the more critical steps as it lends credibility and support to the proposed strategy and can be used to gain the support of upper management. Although challenging, documenting savings is paramount in order to show success

in centralized procurement.⁴² By developing a cost savings model as part of the sourcing strategy buyer's build a case for taking a consolidated approach. It justifies the actions and allows senior managers to realign resources to more effectively support other mission priorities.⁴³

Commitment... <i>Secure up front commitment from top leaders</i> <ul style="list-style-type: none"> • Recognize and communicate the urgency to change service spending practices • Provide clear and strong executive leadership, including goals and targets
Knowledge... <i>Obtain improved knowledge on service spending</i> <ul style="list-style-type: none"> • Develop information system to identify how much is being spent with which service provider for what services • Analyze the data to identify opportunities to reduce costs, improve service levels, and provide better management of service providers
Change... <i>Create supporting structure, processes, and roles</i> <ul style="list-style-type: none"> • Create or identify organizations responsible for coordinating or managing service purchases • Establish proactive business relationships between end users, purchasing units, and other stakeholders • Implement more integrated team-based sourcing processes • Create commodity/service experts
Support... <i>Enable success through sustained leadership, communication, and metrics</i> <ul style="list-style-type: none"> • Obtain sustaining support from senior leadership to facilitate change • Establish clear lines of communication between all affected parties • Demonstrate value and credibility of new processes through use of metrics

Figure 2 GAO Analysis: Industry Best Practices ⁴⁴

Industry's Success

Of course, the greatest measure of the potential of an industry practice is in the demonstrated results. Table 1 identifies just a few of the companies who have leveraged their corporate spend through centralized procurement and presents the results of their efforts. Leading procurement organizations operate, on average, with 46% fewer suppliers than typical companies and concentrate 80% of their spend on just 5.9% of their suppliers.⁴⁵ This concentration of spend not only improves an organization's negotiating leverage but also fosters collaborative buyer-seller relationships which can remove non-value added costs and identify other areas for improvement. These two key concepts (consolidating enterprise-wide volume

and concentrating the supply base) have become industry's mantra in their strategic sourcing initiatives.

Company	Actions and Results
IBM ⁴⁶	<ul style="list-style-type: none"> - consolidated requirements of all its divisions and locations - established 17 councils charter with reducing the number of suppliers and reducing costs - reduced the number of suppliers from ~4,900 in 1993; now about 85% of IBM's \$17.1B in production purchases is with 50 suppliers - realized pricing discounts 5-10% below industry average
Hewlett Packard ⁴⁷	<ul style="list-style-type: none"> - centralized purchasing of key commodities - top priority was to leverage their size and scale to cut costs - reduced the number of direct material suppliers by 53% from 1500 to 720 - spend 85% of their procurement dollars with just 35 suppliers - realized \$1.2B in savings from 2001 to 2004
Brunswick Corp ⁴⁸	<ul style="list-style-type: none"> - centralized purchasing of six distinct units - set specific cost reduction goals - from 1997-1998 reduced procurement costs \$2.7M on \$22M in annual spend
Lucent Technologies, Inc ⁴⁹	<ul style="list-style-type: none"> - top priority was consolidating their purchases and reducing the number of suppliers - developed sourcing strategies for ~20 commodities - from 2000 to 20002 reduced the number of suppliers from over 3,000 to less than 1,500 - spend 80% of their procurement dollars with just 60 suppliers - reduced procurement costs up to 55%
Bristol Myers Squibb ⁵⁰	<ul style="list-style-type: none"> - top priority was consolidating their purchases and reducing the number of suppliers - developed sourcing strategies for ~20 commodities - from 2000 to 20002 reduced the number of suppliers from over 3,000 to less than 1,500 - spend 80% of their procurement dollars with just 60 suppliers - reduced procurement costs up to 55%

Table 1 Industry Strategic Sourcing Efforts: Actions and Results

Benchmarking Industry

According to the Office of Management and Budget the federal government spends approximately \$300 billion on goods and services each fiscal year. In FY2004 the DoD procured nearly \$230 billion in goods and services.⁵¹ The Air Force share was approximately \$55.2B with approximately half of its budget allocated toward purchased goods and services. "A modest 1

percent to 2 percent reduction would produce savings equivalent to the annual revenues of a Fortune 500 company.”⁵² Accordingly, maximizing value for taxpayers is an explicit top priority for the DoD and the OMB. Based on industry’s demonstrated successes with commodity councils it’s no wonder the federal government sought to benchmark the practice. In May 2005, David H. Safavian, Administrator for Federal Procurement Policy, said “the use of strategic sourcing is designed to get better pricing when the government buys commodity items. Strategic sourcing is just another example of our efforts to best leverage the government’s buying power and to realize the most savings for taxpayers.”⁵³ Similarly, the top program objective for the DoD’s department wide strategic sourcing program is a reduction in total cost of ownership. Like industry, the overall purpose of DoD strategic purchasing initiatives is to leverage purchasing volume to reduce purchase costs, and to improve other value added areas such as better customer support, increased quality, and accelerated delivery responsiveness.

Barriers to Successful Strategic Purchasing Within the DoD

Industry's objectives throughout the development of strategic purchasing approaches were clear. Above all, senior managers sought to improve profitability by leveraging corporate buying power, and the results validated their decisions to centralize procurement activities. While the potential of massive cost savings reductions is extremely attractive to the DoD, policymakers must understand the department is not IBM. The DoD and other federal agencies have unique characteristics which may hinder the successful implementation of private sector strategic purchasing best practices. These characteristics include having a commodity portfolio that may not allow for leveraging opportunities, procurement statutes that counter leverage buying principles, an organizational structure that lacks a chief procurement officer vested with full responsibility and accountability for procurement spend, and a fragmented and balkanized buying arm that hinders synergy and unity of effort.

The Difficulty Leveraging Services in the DoD

The DoD spends significant amounts of its annual procurement spend on services. "Between 2001 and 2002, DOD's reported spending for services contracting jumped almost 18 percent to about \$93 billion."⁵⁴ In 2004, the DoD's spending on services approached \$100 billion annually.⁵⁵ With services now accounting for more than half of the DoD's total annual spend seeking leverage opportunities is appealing. Leveraging relates to the concept of economies of scale. Scale economies refer to economic efficiencies earned by carrying out a process on a larger and larger scale. Cost reductions come from the ability to distribute non-production costs over a greater number of products. In other words, as volume increases organizations gain economic efficiencies by diffusing total input costs across a broader base.

Ultimately this decreases the marginal cost of producing the good or service. When an organization purchases in bulk it achieves economies of scale by decreasing the average cost of inputs. Researchers have identified two segments of economies of scale: volume and learning.⁵⁶ Volume economies of scale refer to the definition provided above; namely, increases in production volume allow for lower unit costs. Organizations achieve learning economies of scale where improvements or advancements in labor and organizational efficiencies or improvements in planning or techniques lead to lower total costs and per unit costs. People often refer to these gains as learning curve efficiencies.

Centralization of labor in large-scale operations gives workers the opportunity to become proficient at the specific tasks assigned to them, and specialization further reduces labor inefficiencies. However, geographically distributed services, such as many of those required at DoD installations may not allow for economies of scale because of the dispersion of labor. In fact, dispersion of services may actually increase average cost and result in diseconomies of scale. While this characteristic is not unique to the DoD, what is distinctive is the DoD's inability to replicate the private sector's response of possibly consolidating operations. For example, even where operational efficiencies are possible base closings or mergers are controlled by Congress, not the DoD. Figure 3 displays the level of centralized purchasing for services by category.⁵⁷ Note the trend for the decentralization of distributed services. Whereas complex services or those requiring retained relationships with the procuring organization are often targets for centralization, non-complex distributed services such as food service, landscaping, janitorial, gate guards, waster removal or construction are not good candidates for centralization. These types of services are location specific in that contractors must physically perform the services on the requiring installation. Also, distributed services are typically labor intensive operations

where labor costs comprise the majority of total contract costs. Typically, labor intensive are not amenable to economies of scale influences. This constraint may further offset potential learning economies of scale by inhibiting corporate learning. Lastly, services such as these are nearly impossible to centrally purchase effectively and efficiently because supply markets are highly localized. Consequently, they are simply not good candidates for centralized purchasing. Still, bulk purchasing of services could allow for some volume economies of scale by distributing fixed costs across a broader base.

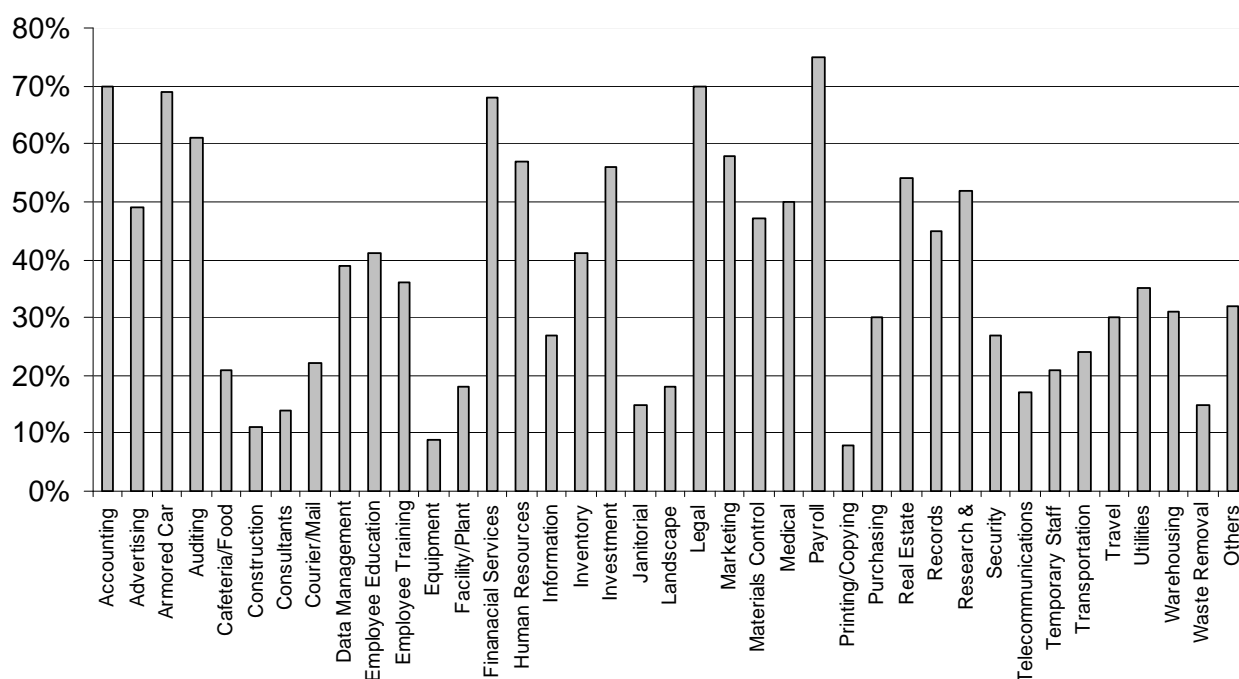


Figure 3 Centralized Purchasing of Services ⁵⁸

The Effect of Federal Procurement Statutes on Leveraging Services

Statutes such as the McNamara-O'Hara Service Contract Act (SCA) of 1965 and the Davis-Bacon and Related Acts (DBRA) may actually inhibit volume economies of scale with respect to leveraging labor costs. In fiscal year 2003, federal agencies spent over \$45B on

contract services covered by the SCA.⁵⁹ The SCA applies to every contract “entered into by the United States or the District of Columbia where the principal purpose of the contract is to furnish services in the U.S. through the use of “service employees”.”⁶⁰ The SCA does not apply to certain types of contractual services, but where applicable it requires contractors and subcontractors performing on contracts in excess of \$2,500 to pay service employees no less than the wage rates and fringe benefits found prevailing in the locality. The Department of Labor determines the prevailing wage rates and fringe benefits in an area by the average of the wages and benefits earned by at least 50% of workers in a given service category and issues formal wage determinations which are incorporated into federal contracts.

Similarly, the DBRA “requires all contractors and subcontractors performing work on federal or District of Columbia construction contracts or federally assisted contracts in excess of \$2,000 to pay their laborers and mechanics no less the prevailing wage rates and fringe benefits for corresponding classes of laborers and mechanics employed on similar projects in the area.”⁶¹ The requirement for contractors to pay their employees directed wage rates on federal contracts counteracts the establishment of market determined rates. As a result, not only are labor costs not leveraged but labor costs under SCA and DBRA provisions may actually be higher than those established in a competitive marketplace. As a contracting officer assigned at Lackland AFB, I managed a laundry services contract for a major military medical center. During negotiations the contractor reported he had to maintain essentially two payroll systems – one for employees working on federal contracts and another for those engaged in commercial work. He commented that due to the requirements of the SCA he was paying his federal workers at higher rates than paid on other commercial contracts. The Congressional Budget Office estimated that by repealing the SCA the federal government could reduce the cost of procured services by

approximately \$600M in 2000 and by about \$6.1B from 2000-2009.⁶² Although the projected savings is difficult to measure, they argue repealing the act would promote greater competition among bidders and would allow contractors the flexibility to reduce the costs of providing services. Similarly, the CBO argued repealing the DBRA could help reduce costs by about \$245M in 2000 and by about \$9.6B from 2000-2009 using a similar rationale.⁶³ Opponents argue repealing the acts could reduce the quality of services provided. Nevertheless, these laws interfere with competitive market forces and their effect on volume leveraging.

Additionally, contract administration for federal service contracts is labor intensive and could be exacerbated if geographically dispersed services were to be consolidated. In addition to location specific surveillances and quality evaluations required throughout the life of the contract, contracts under SCA or DBRA provisions often require annual wage determinations to address changing prevailing wage rates and benefits. Policymakers should consider the costs and burden of performing these administrative activities on consolidated contracts. In 2004 I served as a contracting officer on a commodity council effort to consolidate gate guard services at 29 installations across the U.S. The two contracts had over 50 distinct wage determinations. The magnitude of the task required by the contracting office to manage the volume of determinations was burdensome in issuing the request for proposal alone not to mention the administrative costs of addressing the annual wage determinations. While consolidating service contracts could lead to other value added areas such as decreased transaction costs, timeliness, or other process efficiencies these must be weighed against the increased administrative costs and burden.

Recall Kraljik's Strategic Sourcing Model wherein he recommended sourcing strategies based on the commodity's profit impact and supply risk. Leverage items, with their high profitability profiles and low supply risk, are the key targets for organizations seeking cost

reductions. The DoD purchases a wide variety of commercial services for its installations and facilities. These include groundskeeping, janitorial services, security guard services, and information technology and communication services. These types of services are abundant in the market place and would be categorized as having a relatively low supply risk. However, the profitability potential for services is low as geographic dispersion and federal statutes diminish the cost reduction potential associated with the leveraged buying of services. Accordingly, perhaps services should not be considered a leverage item in the DoD.

The Effect of the “Buy American Act” on Strategic Purchasing

The Buy American Act is another example of a statutory barrier to successfully implementing strategic sourcing. Congress codified the Act in 1933 with the express purpose of restricting the purchase of supplies that are not domestic end products. The act seems to be rooted in the pre-World War II protectionist policies of the U.S. As implemented by FAR Subpart 25 the provision provides a preferential treatment for unmanufactured articles, manufactured goods and construction materials mined, produced or manufactured in the U.S. Regardless of its intent, the Buy American Act prevents the federal government from exercising strategic sourcing best practices as demonstrated by industry. In September 2005 Supply Chain Management Review identified five primary strategies that procurement leaders are adopting as part of their procurement transformation efforts. One of these strategies involves organizations adopting low-cost-country supply (LCCS) initiatives. In efforts to reduce supply costs companies are expected to double their spending with offshore suppliers by 2008.⁶⁴ Savings can be dramatic with offshore manufacturing prices as much as 30 to 50 percent less than those in the

United States.⁶⁵ The Buy American Act expressly prohibits federal procurement organizations from accessing the same leveraging opportunities as industry.

The Effect of Federal Labor Laws and Small Business Goals on Strategic Purchasing

Industry's strategic sourcing successes hinge on leveraging principles which require consolidating enterprise-wide volume and concentrating the supply base. On average, leading procurement organizations operate with approximately 50% fewer suppliers and concentrate upwards of 80% of their purchasing on approximately 6% of their suppliers. These practices cause alarm amongst small business advocates in the United States. Table 2 lists the contributions of U.S. small businesses as reported by the Small Business Administration.

Contributions of U.S. Small Businesses
<ul style="list-style-type: none">• provide approximately 75 percent of the net new jobs added to the economy.
<ul style="list-style-type: none">• represent 99.7 percent of all employers.
<ul style="list-style-type: none">• employ 50.1 percent of the private work force.
<ul style="list-style-type: none">• provide 40.9 percent of private sales in the country.
<ul style="list-style-type: none">• account for 39.1 percent of jobs in high technology sectors in 2001.
<ul style="list-style-type: none">• account for 52 percent of private sector output in 1999.
<ul style="list-style-type: none">• represent 97 percent of all U.S. exporters

Table 2 Small Business Statistics⁶⁶

The federal government recognizes the importance of small businesses to the economy and actively promotes small business growth through advocacy programs, laws and regulations which incorporate small businesses in the federal acquisition process, specific goals for agencies

in small business concerns, and reserving categories of federal procurements solely for small businesses. In March 2002 the President issued his Small Business Agenda. Citing small business as the backbone of the U.S. economy the agenda aims at creating an environment in which small businesses can flourish. This paper does not argue the merits of small businesses contributions to the workforce, to the economy or to innovations or technology advancements. Rather, this paper addresses, in part, the dynamics of small business advocacy which serve as a barrier to successfully implementing strategic purchasing in the DoD.

Federal agencies have attempted to leverage buying power by consolidating and bundling contracts. According to Federal Acquisition Regulation, subpart 2.101, contract bundling means to consolidate “two or more requirements for supplies or services, previously provided or performed under separate smaller contracts that were or could have been performed by small business, into a solicitation for a single contract that is likely to be unsuitable for award to a small business concern due to diversity, size, or specialized nature of the elements of performance specified; aggregate dollar value; geographic dispersion of contract performance sites; or any combination of these factors”. Contract consolidation refers to a similar approach with the exception that it pertains to all combinations of requirements that were previously performed separately by businesses of any size (large or small). Agencies bundle and consolidate contracts in order to leverage the government’s buying power. The practices agree with strategic sourcing principles practiced by industry.

Unfortunately, the goals of consolidation and bundling are nearly polarized with the goals of small business development. In fact, in 2002 the OMB prepared a strategy for “unbundling” federal contracts. The strategy explicitly states a federal objective of not pursuing operational efficiencies at the expense of reducing small business opportunities.⁶⁷ They argue that bundled

contracts have reduced federal contracting opportunities for small businesses and that for every \$100 awarded on a bundled contract there is a \$33 decrease to small businesses.⁶⁸ As a result, bundling and consolidation efforts receive considerable opposition. The President's strategy focuses not just on unbundling contracts and avoiding future bundling but on actively seeking opportunities for small business awards. FAR 19.202-1 reinforces this small business emphasis by requiring federal contracting officers to divide proposed acquisitions of supplies and services into smaller lots where applicable in order to permit offers on quantities less than the total requirement and to plan acquisitions such that more than one small business concern may perform the work. The requirements to not only scale down purchase volume but to expand the number of suppliers and contracts awarded violate industry's strategic sourcing principles.

Not all public procurement activities yield to the small business rationale. In 2004, state procurement officials in Pennsylvania challenged the rationale of emphasizing small business to the detriment of operating efficiencies. While strategically sourcing office supplies, the state reduced its supplier base from over 1,800 separate vendors to one central supplier. The decision drew opposition from small business advocates who argued the economical impact of reducing small business opportunities. The state's general services director stated "purchasing didn't have a mandate from the voters to spend more money and buy more from more vendors. We had a mandate to reduce spending."⁶⁹ The state argued their responsibility was creating an environment wherein small businesses could flourish not subsidizing them through directed contracts.

Another area that confuses the issue is the government's ambiguity in direction provided federal agencies in regards to procurement policy. In a May 2005 OMB memo sent to all federal agencies, Mr. Clay Johnson, the OMB Deputy Director for Management, directed agencies to

leverage spending to the maximum extent possible using strategic sourcing methods. The direction requires agencies to identify at least three commodities that could be purchased more effectively and efficiently and requires agencies to set cost reduction goals. Also, in the same memo Mr. Clay directs agencies to increase achievement of socio-economic goals (small business goals) and improve vendor access to business opportunities. The guidance seems conflicting in that pure leveraging through strategic purchasing requires consolidating enterprise-wide volume and concentrating the supply base. How can a procurement organization simultaneously concentrate the supply base while increasing small business subcontracting goals and improving small business access to business opportunities? The new direction creates a paradox for federal buyers. Any compromise between leveraging objectives and small business objectives ultimately reduces the potential benefits of either approach.

No Single Voice in Federal Procurement

The DoD procurement system supports perhaps the largest and most complex organization in the world operating out of 600,000 facilities at 6,700 locations in 146 countries. Out of this system DoD contracting officers annually award nearly 9.3 million contracts. The organization is really more of a conglomeration of individual organizations rather than one entity. The distinctive missions of these individual units mark them as distinct as separate companies operating in the commercial marketplace with each unit operating as a quasi profit and loss center. Responsibility and accountability for efficient procurement execution rests at the unit level. Thai described the procurement system as “nested structure of systems within systems” with a structure of “centralized procurement within the executive branch, and a complicated structure of decentralized procurement within executive agencies.”⁷⁰ In order to

provide adaptive, flexible and tailored procurement solutions for individual units the system is fragmented and decentralized by design. As a by product of this design, though, there is no single voice in the DoD responsible for the organization spend, or with the ability to dictate and enforce strategic acquisition programs. Additionally, the fragmented purchasing system limits the DoD's efficiency and effectiveness.

Leading strategic sourcing experts cite two critical factors necessary to successfully implement strategic purchasing. First, they identify the need for top management to believe fully that centralized procurement is the best method to improve procurement effectiveness. Secondly, they identify the requirement to put in place a chief procurement officer charged with the responsibility and accountability for procurement operations.^{71 72} This individual should have authority over key procurement responsibilities especially source selection and supplier performance decisions. Without this "single voice" with complete visibility, oversight, and profit and loss responsibilities, centralization efforts in the DoD will fail.

Air Force Commodity Councils (the Air Force's strategic purchasing teams) rely on collaboration and consensus among team members chartered to coordinate on strategic purchases. Within this construct, council chairmen lack the authority to require participation and enforce procurement policies and sourcing decisions. For example, in the recently established USAF Force Protection Commodity Council the Director for Air Force Security Forces (AF/XOF) and the Air Force's Deputy Assistant (Contracting) (SAF/AQC) shared the responsibilities as the Commodity Sourcing Official and sanctioned the Commander of the Air Force's Security Forces Center (HQ AFSC) to lead the Force Protection Commodity Council process.⁷³ By design, the council senior leadership team (the CSO and HQ AFSFC) provided policy support in commodity process execution and program direction, oversaw strategy

development and ensured execution and reporting compliance. However, the Air Force failed to designate accountability for program success and failed to require enterprise-wide participation. In other words, buying organizations were never required to participate in the strategic purchasing efforts, and no one was responsible for results. The charter tasked the major commands (MAJCOMS) to identify representatives to serve as subject matter experts and to survey base-level functional areas for information on current usage and future requirements but never required MAJCOMS to centrally purchase commodities. This voluntary aspect of the process undermined the Air Force's need to consolidate enterprise-wide volume and sub-optimized the potential outcome by weakening the organization's leveraging power.

One only needs to follow the money trail to identify where the power ultimately rests. After Congress appropriates and apportions funding to federal agencies, the services then distribute funds through the major commands to individual organizations that then have the responsibility for funds obligation and execution. Procurement responsibility in the DoD resides at the unit level. In DoD strategic purchasing scenarios these individual units voluntarily agree to collaborate in the venture, but as the owners of the requirements and the funding, the decision to participate is theirs alone. Unfortunately, decentralized units are often reluctant to give up control of sourcing decisions and want to control everything that touches their business operations.⁷⁴ The Councils, then, rely on the collective teamwork of multiple decentralized organizations and merely hope to achieve successful solutions. With this structure it is nearly impossible to effectively leverage the organization's global buying power. Without a chief procurement officer with real power to affect all designated expenditures, strategic purchasing in the DoD will only be a titular initiative. With no single voice responsible for the acquisition process, it is incredibly difficult to implement strategic sourcing solutions.

The absence of a single voice also leads to confusion and ambiguity in regards to DoD actions and objectives. Industry objectives are clear. Procurement leaders cite strategic purchasing as one of the first things a company should do to save money.⁷⁵ By taking a corporate approach to procurement, private organizations use strategic purchasing practices to optimize price, quality, delivery and technology and they task procurement organizations to achieve demanding cost reduction goals. DoD actions, on the other hand, seem disjointed and ambiguous. Congress and DoD leaders acknowledge the current fiscal crisis, and as of 1 October 2005, the OMB requires federal agencies use strategic sourcing to lower costs and maximize the value of each dollar spent. However, the DoD seems to be targeting the wrong areas. Rather than focusing on true leverage items with high returns the department's focus seems directed more on process control and transactional analysis in order to improve operating efficiencies. Some may argue dollars saved through improved operations (efficiency funds) could be used to fund other initiatives. Unfortunately, there is no method to budget, plan for and obligate efficiency funds. Also, as efficiency funds relate to manpower costs they do little to fund tangible requirements for goods and services. Improving operating efficiencies is a noble effort but only a small portion of the problem. The department faces not just the problem of *doing* more with less but also *getting* more for less. The DoD must do more than reduce their operating costs (a transactional process approach) -- they must reduce purchasing costs in order to survive the current budget shortfall (a strategic approach). Lastly, since quantifying efficiency savings is subjective and difficult to measure, DoD procurement organizations may find it hard to "sell" the concept of strategic purchasing to senior leaders.

Conclusion

The DoD is struggling to survive a fiscal crisis. The department faces rising operating and maintenance costs, necessary modernization costs, and higher personnel costs required for recruitment and retention, healthcare and other must pay bills. Since increasing the budget is not an alternative, the department will have to transform their business processes. One alternative is to reduce the cost of business operations by increasing the efficiency with which current funding is used (doing more with less). Another alternative is to identify more innovative ways to operate. This is more than just trying to meet existing requirements more efficiently. Rather, it involves meeting existing requirements by operating in very different ways such as strategic purchasing (getting more for less). When faced with flat demand and a competitive market, leading organizations used strategic purchasing to drastically reduce purchasing costs. In many cases organizations reduced purchasing costs by as much as 55% annually. They accomplished these savings using the two central tenets of strategic purchasing: 1) consolidating enterprise-wide volume, and 2) concentrating the supply base.

The DoD has barriers to successfully implementing strategic purchasing. These barriers are such that the department's potential cost reductions will pale in comparison to those achieved by industry. First, geographically distributed services required by the department are not amenable to leverage principles. Furthermore, labor laws such as the Service Contract Act and the Davis-Bacon Act not only inhibit scale efficiencies but may also add costs. Additionally, the federal government's emphasis on supporting small businesses requires the DoD to abandon the key tenets of strategic purchasing. Strategic purchasing and small business goals are polarized. The DoD can not simultaneously concentrate the supply base while increasing small business subcontracting goals and improving small business access to business opportunities. Therefore,

any DoD strategic purchasing process will require a compromise between small business goals and DoD cost reduction goals which ultimately sub-optimizes outcomes for each. Lastly, because of its requirement for decentralized operations, the DoD is unable to establish a chief procurement officer with the authority to effect all designated expenditures. Without that single voice it will be incredibly difficult for the DoD to successfully implement strategic sourcing solutions, and the process will be perceived as titular.

I recommend the DoD readdress its strategic purchasing program. First, I believe the DoD should reexamine its efforts of centralizing purchases for geographically distributed services. These types of commodities should not be considered as leverage items. They are not amenable to scale economies and the SCA and DBRA further inhibit potential cost savings. While commodity councils may achieve some process efficiencies through timelier ordering or by eliminating redundancies, the administrative costs may outweigh the benefits. Instead, the DoD should target small businesses as prime candidates for providing these types of services. With contracted services now accounting for more than half of the DoD's total annual spend the potential for small business is enormous. Secondly, although pressured by the OMB directive to engage in strategic purchasing, the DoD must proceed smartly. Before executing any strategic purchasing efforts the department must place a greater emphasis on quantifying potential savings. By developing cost savings models the DoD can build a case for taking a consolidated approach, justify its actions, and allow senior managers to realign resources to more effectively support other mission priorities. In some cases the DoD may find the associated administrative costs of strategic purchasing actions may outweigh the potential benefits. Therefore, efforts to regionalize or centralize services procurement should be carefully scrutinized from a cost standpoint. The DoD must drastically reduce costs, or it will never survive this budget crisis.

-
- ¹ Office of the Secretary of Defense (OSD), *Defense Budget Materials for FY 1998 to 2007 Budgets*, Financial Summary Tables for FY 1998 to 2007, <http://www.dod.mil/comptroller/defbudget/fy2007/index.html>
- ² David Byron, "Air Force Officials Project Budget Shortfall," *Air Force Print News*, 26 July 2004, http://www.af.mil/news/story_print.asp?storyID=123010018
- ³ Daniel W. Gottlieb, "Military Declares War on Spend," *Purchasing Magazine*, 20 May 2004, <http://www.purchasing.com/article/CA416336.html?text=military+declares+war+on+spend>
- ⁴ William Gates, "Department of Defense Procurement Policy Reform: An Evolutionary Perspective" Naval Postgraduate School, Document NPS-54-89-01 Monterey CA, January 1989, 2.
- ⁵ Jacques S. Gansler, *Affording Defense*. Massachusetts: MIT Press, 1989, 179.
- ⁶ David D. Acker, "The Maturing of the DOD Acquisition Process," *Defense Systems Management Review*, Summer-1980, 14.
- ⁷ Gates, "Department of Defense Procurement Policy Reform: An Evolutionary Perspective"
- ⁸ Doug Karas, "Commodity Council Makes \$10 Million Impact On Spending," *Air Force Print News*, 26 July 2004, http://www.af.mil/news/story_print.asp?storyID=123008242
- ⁹ James Carbone, "HP Sources Globally To Cut Costs," *Purchasing Magazine*, Electronics & Technology, Vol. 133 Issue 11, (17 June 2004):30-36.
- ¹⁰ James Carbone, "Reinventing Purchasing Wins the Medal For Big Blue," *Purchasing Magazine*, Vol. 127 Issue 4, (16 September 1999): 38-51.
- ¹¹ E. G. Gabbard, "Strategic Sourcing: Critical Elements And Keys To Success," Power point presentation at Institute of Supply Management International Conference, Tempe, Arizona, April 2004, <http://www.ism.ws/ConfPastandOnlineDaily/Files/Apr04/HA-Gabbard.pdf> on November 12, 2004.
- ¹² Rene G. Rendon, "Commodity Sourcing Strategies: Supply Management in Action." (Acquisition Research Sponsored Report Series, Research Report no. NPS-CM-05-003, Graduate School of Business and Public Policy, Naval Postgraduate School, Monterey, CA, 31 January 2005): 3-4.
- ¹³ Anne Millen Porter, "Containing Total Spend," *Purchasing Magazine*, 6 November 2003, <http://www.purchasing.com/article/CA337312.html>
- ¹⁴ Staff, "Buyers Cost Reduction Goals Average 12% In 02," *Purchasing Magazine*, 10 October 2002, <http://www.purchasing.com/article/CA250881.html?text=buyers+cost+reduction+goals>
- ¹⁵ Ibid.
- ¹⁶ Ibid.
- ¹⁷ Rendon, "Commodity Sourcing Strategies: Supply Management in Action.":14.
- ¹⁸ Ibid
- ¹⁹ Joanie F. Newhart, "Strategic Sourcing: What's All The Buzz About," *Contract Management*, January 2006, 26-32.
- ²⁰ Office of Management and Budget, *OMB Promotes Use of Strategic Sourcing in Acquisition*, Office of Management and Budget Press Release 2005-12 (Washington, D.C.: Office of Management and Budget, 25 May 2005), 1.
- ²¹ Justin Sullivan, "The Path to Strategic Sourcing," *Federal Times*, 12 January 2006, <http://www.federaltimes.com/index2.php?S=1466023>
- ²² Gabbard, "Strategic Sourcing: Critical Elements And Keys To Success,"
- ²³ Stanley Heath, "Tackling Spend Analysis," *Contract Management* (January 2006): 40-45.
- ²⁴ ibid
- ²⁵ Zach Patton, "Buy by Data. States that can apply "strategic sourcing" to their purchasing operations stand to save millions of dollars," *Governing*, January 2006, <http://governing.com/articles/1purch.htm>
- ²⁶ Gabbard, "Strategic Sourcing: Critical Elements And Keys To Success,"
- ²⁷ Anne Millen Porter, "Firms Give Purchasing More Central Control," *Purchasing Magazine*, Vol. 127 Issue 1 (15 July 1999): 35-36.
- ²⁸ Peter Kraljik, "Purchasing Must Become Supply Management," *Harvard Business Review*, Vol. 61 Issue 5 (September/October 1983):109-117.
- ²⁹ ibid
- ³⁰ Ibid
- ³¹ Gabbard, "Strategic Sourcing: Critical Elements And Keys To Success,"
- ³² ibid
- ³³ Kraljik, "Purchasing Must Become Supply Management,".
- ³⁴ EGabbard, "Strategic Sourcing: Critical Elements And Keys To Success,"

³⁵ *ibid*

³⁶ James Carbone, "Hewlett-Packard Wins For The 2nd Time." *Purchasing Magazine*, Metals Edition, Vol. 133 Issue 14. (2 September 2004):34-48.

³⁷ Gene Richter, "Centralize!," *Purchasing Magazine*, 6 February 2003, <http://www.purchasing.com/index.asp?layout=articlePrint&articleID=CA273586>

³⁸ John A. Ausink, Laura H. Baldwin and Christopher Paul, "Air Force Procurement Workforce Transformation: Lessons From the Commercial Sector," Rand Project Air Force report, Rand Corporation, Santa Monica, CA, 2004, 9-81.

³⁹ Stanley Heath, "Tackling Spend Analysis," *Contract Management* (January 2006): 40-45.

⁴⁰ General Accounting Office, *Best practices: Using Spend Analysis to Help Agencies Take a More Strategic Approach to Procurement*, Report no. GAO-04-870, (Washington, D.C.: General Accounting Office, September 2004):5.

⁴¹ Timothy Lasseter, *Balanced sourcing: Cooperation and competition in supplier relationships*. (San Francisco, CA: Jossey-Bass Publishers, 1998)

⁴² Dave Stephens, "Why Center Led Procurement Is Gaining in Purchasing Popularity," *Purchasing Magazine*, 5 February 2005, <http://www.purchasing.com/article/CA502341.html>

⁴³ Heath, "Tackling Spend Analysis", 40-45.

⁴⁴ General Accounting Office, *Best practices: Using Spend Analysis to Help Agencies Take a More Strategic Approach to Procurement*.

⁴⁵ Staff, "Hacket Report Finds Best Procurement Orgs See Greater ROI," *Purchasing Magazine*, Vol. 134 Issue 20 (8 December 2005): 20-22.

⁴⁶ James Carbone, "Reinventing Purchasing Wins the Medal For Big Blue," *Purchasing Magazine*, Vol. 127 Issue 4, (16 September 1999): 38-51.

⁴⁷ Carbone, "Hewlett-Packard Wins For The 2nd Time"

⁴⁸ Susan Avery, "Brunswick Saves Big Bucks By Centralizing Services Buy," *Purchasing Magazine*, Vol. 126 Issue 4, (25 March 1999): 38-41.

⁴⁹ James Carbone, "Lucent Supply Chain Focus Fattens Margins." *Purchasing Magazine*, 19 September 2002, <http://www.purchasing.com/article/CA243210.html>

⁵⁰ Joanie F. Newhart, "Strategic Sourcing: What's All The Buzz About," *Contract Management*, January 2006, 26-32.

⁵¹ Office of the Secretary of Defense (OSD), *Defense Budget Materials for FY 1998 to 2007 Budgets*, Financial Summary Tables for FY 1998 to 2007, <http://www.dod.mil/comptroller/defbudget/fy2007/index.html>

⁵² Justin Sullivan, "The Path to Strategic Sourcing," *Federal Times*, 12 January 2006, <http://www.federaltimes.com/index2.php?S=1466023>

⁵³ Office of Management and Budget, *OMB Promotes Use of Strategic Sourcing in Acquisition*, Office of Management and Budget Press Release 2005-12 (Washington, D.C.: Office of Management and Budget, 25 May 2005), 1.

⁵⁴ General Accounting Office, *Improved Knowledge of DoD Service Contracts Could Reveal Significant Savings*, Report no. GAO-03-661 (Washington, D.C.: General Accounting Office, June 2003):4.

⁵⁵ General Accounting Office, *Best practices: Using Spend Analysis to Help Agencies Take a More Strategic Approach to Procurement*, Report no. GAO-04-870, (Washington, D.C.: General Accounting Office, September 2004):9.

⁵⁶ John N. Pearson and Joel D. Wisner, "Using Volume and Economies of Scale to Benefit Long-Term Productivity," *Industrial Management*, Vol. 35 Issue 6 (Nov/Dec 1993):13-16.

⁵⁷ Center for Strategic Supply (CAPS) Research. "Defining and Determining the "Services Spend" in Today's Services Economy," August 2002

⁵⁸ *Ibid*

⁵⁹ General Accounting Office, *Service Contract Act: Wage Determination Process Could Benefit From Greater Transparency and Better Use of Violation Data Could Improve Enforcement*, Report no. GAO-06-27, (Washington, D.C.: General Accounting Office, December 2005):1.

⁶⁰ U.S. Department of Labor, "The McNamara-O'Hara Service Contract Act (SCA)," Office of Compliance Assistance Policy, accessed on 26 February 2006, <http://www.dol.gov/compliance/laws/comp-sca.htm>

⁶¹ U.S. Department of Labor, "The Davis-Bacon and Related Acts," Office of Compliance Assistance Policy, accessed on 26 February 2006, <http://www.dol.gov/compliance/laws/comp-dbra.htm>

⁶² Congressional Budget Office, *Maintaining Budgetary Discipline: Spending and Revenue Options*, Congressional Budget Office Report (Washington D.C.: Congressional Budget Office, April 1999).

<http://www.cbo.gov/showdoc.cfm?index=1222&sequence=0>

⁶³ Ibid

⁶⁴ Tim A Minihan, "Five Strategies for High-Performance Procurement," *Supply Chain Management Review*, 1 September 2005, <http://www.manufacturing.net/scm/article/CA6273114.html>

⁶⁵ Ibid

⁶⁶ U.S. Small Business Administration, Small Business Statistics, accessed on 22 February 2006,

<http://www.sba.gov/aboutsba/sbastats.html>

⁶⁷ Office of Management and Budget, *Contract Bundling: A Strategy For Increasing Federal Contracting Opportunities for Small Business*, Office of Federal Procurement Policy Report (Washington, D.C.: Office of Management and Budget, October 2002), 1-2.

⁶⁸ Ibid

⁶⁹ Zach Patton, "Buy by Data. States that can apply "strategic sourcing" to their purchasing operations stand to save millions of dollars," *Governing*, January 2006, <http://governing.com/articles/1purch.htm>

⁷⁰ K.V. Thai, "Public procurement reexamined," *Journal of Public Procurement*, Volume 1, Issue 1 (2001): 9-50.

⁷¹ Gene Richter, "Centralize!," 1.

⁷² Anne Millen Porter, "Containing Total Spend," 6.

⁷³ Charter, United States Air Force, Force Protection Commodity Council, 15 Mar 2004.

⁷⁴ Louis V Gerstner, "Who Says Elephants Can't Dance? Inside IBM's Historic Turnaround." (New York, NY: Harper Business, 2002), 244.

⁷⁵ Anne Millen Porter, "Containing Total Spend"

Bibliography

- Adamson, J. (1980). Corporate long-range planning must include procurement. *Journal of Purchasing and Materials Management*, Spring, Vol 16, No. 1, 25-32.
- Avery, S. (2003). Cessna soars. *Purchasing Magazine Online*, September 4, 2003. Retrieved from <http://www.manufacturings.net/pur/index> on November 6, 2004.
- Bhote, K.R. (1989). *Strategic supply management: A blueprint for revitalizing the manufacturer-supplier partnership*. New York: AMACOM.
- Buckenmayer, R.H., Noland, C.H. (1998). *Strategic Commodity Management: Lessons From a Major Implementation* (Presentation at the 1998 NAPM International Purchasing Conference). Retrieved from <http://www.ism.ws/ResourceArticles/1998/98cp10.cfm> on October 3, 2004.
- Burt, D., N., Dobler, D. W., & Starling, S. L. (2003). *World class supply management: The key to supply chain management*. New York: McGraw-Hill Irwin.
- Cahlink, G. (2004). Seeking services. *Government Executive*, August 15, 2004, 46. CAPS Research Study (1998). *The future of purchasing and supply, A five- and tenyear forecast*. Tempe, Arizona: Center for Advanced Purchasing Studies/National Association of Purchasing Management, Inc., September 1998.
- Carbone, J. (1999). Reinventing purchasing wins the medal for big blue. *Purchasing Magazine Online*, September 16, 1999. Retrieved from <http://www.manufacturings.net/pur/index>, on November 9, 2004.
- Carbone, J. (2004). Hewlett-Packard wins for the 2nd time. *Purchasing Magazine Online*, September 2, 2004. Retrieved from <http://www.manufacturings.net/pur/index> on November 6, 2004.
- Carbone, J. (2002). Lucent's supply chain focus fattens margins. *Purchasing Magazine Online*, September 19, 2002. Retrieved from <http://www.manufacturings.net/pur/index> on November 6, 2004.
- Carter, J. R. (2000). Development of supply strategies. In J.L. Cavinato & R.G. Kauffman (Eds.), *The Purchasing Handbook: A Guide for the Purchasing and Supply Professional* (pp 81-98). New York: McGraw Hill.
- Charter, United States Air Force, Force Protection Commodity Council, 15 Mar 2004.
- Corey, E.R. (1978). *Procurement management: Strategy, organization, and decisionmaking*. Boston, Mass: CBI Publishing Co. Inc.

Department of Defense Procurement Conference, (2004). Strategic sourcing and spend analysis, May 27, 2004. Retrieved from http://www.acq.osd.mil/dpap/about/Procurement2004/presentations/D_BoydConsolidatedPanel.pdf on November 12, 2004

Federal Acquisition Regulation (2000). FAR 1.102. Retrieved from <http://farsite.hill.af.mil/VFFARa.HTML>

Gabbard, E. G. (2004). Strategic sourcing: Critical elements and keys to success (Paper presented at Institute of Supply Management International Conference, Tempe, Arizona), April 2004. Retrieved from <http://www.ism.ws/ConfPastandOnlineDaily/Files/Apr04/HA-Gabbard.pdf> on November 12, 2004.

General Accounting Office. (2002). Best practices: Taking a strategic approach could improve DOD's acquisition of services, (GAO-02-230). Washington, DC. General Accounting Office, (2003). Best practices: Improved knowledge of DOD service contracts could reveal significant savings, (GAO-03-661). Washington, DC.

General Accounting Office, (2003). Contract management: High level attention needed to transform DOD services acquisition, (GAO-03-935). Washington, DC.

Gottlieb, D. W. (2004). Military declares war on spend. Purchasing Magazine, May 20, 2004, 44-48.

Henderson, B.D. (1975). The coming revolution in purchasing. Journal of Purchasing and Materials Management, Summer, Vol 11, No. 2, 44-46.

Kraljic P. (1983). Purchasing must become supply management, Harvard Business Review, September/October, 109-117.

Layton, E. (2004,). Director, defense procurement and acquisition policy holds procurement conference. Defense AT&L, September-October, 90-95.

Lasseter, T. M. (1998). Balanced sourcing: Cooperation and competition in supplier relationships. Jossey-Bass Publishers: San Francisco.

Morgan, J. P. (2004). Book of winners. Purchasing Magazine Online. Retrieved from <http://www.manufacturtrng.net/pur/index> on November 9, 2004.

Nelson, D., Moody, P.E., & Stegner, J. (2001). The purchasing machine: How the top ten companies use best practices to manage their supply chains. New York: TheFree Press.

Porter, M.E. (1998). Competitive strategy: Techniques for analyzing industries and competitors. New York: The Free Press.

- Raedels, A. R. (2000). The supply management process. Tempe, Arizona: National Association of Purchasing Management.
- Reed, T. S., Bowman, D.E., & Knipper, M. E. (2005). The challenge of bringing industry best practices to public procurement: Strategic sourcing and commodity councils. In K.V. Thai, A. Araujo, R.Y. Carter, G. Callander, D. Rabkin, R.Grimm, K.R.E. Jensen, R.E. Lloyd, C.P. McCue, and J. Telgen (Eds.) Challenges in Public Procurement: An International Perspective. Boca Raton, Florida: PrAcademic Press.
- Smock, D. (2001) Deere takes a giant leap. Purchasing Magazine Online, September 6, 2001. Retrieved from <http://www.manufacutring.net/pur/index> on November 6, 2004
- Speckman, R. E. (1988) Strategic Suppliers Selection: Understanding long-term buyer relationships. Business Horizons, July-August, Vol 31, No. 4, 75-81.
- Temin, T. (2004). Air force council saves on first PC commodity buy. Government Computer News, August 27, 2003. Retrieved from [http://www.gcn.com/vol1_no1/daily - updates/23299-1.html](http://www.gcn.com/vol1_no1/daily_updates/23299-1.html) on November 6, 2004.
- Thai, K.V. (2001). Public procurement reexamined. Journal of Public Procurement, 1 (1), 9-50.